RHIC Run-8 Startup Schedule and Tasks

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Caution! The following schedule is subject to change. Please note release date above.

1 Injector Setup

Each day from Mon 22 Oct through Fri 26 Oct we will work with deuterons in Booster and AGS after NSRL has finished it's scheduled activites for the day. (The NSRL run ends on Fri 26 Oct).

1.1 Sun 21 Oct

1. Tandem transport deuterons (d) to TTB beamstop.

1.2 Mon 22 Oct

1. Setup injection and acceleration of d in Booster on BU2. Here we capture on harmonic $h = 2$ and accelerate up to the merging porch on this harmonic using the A3 and B3 RF cavities.
2. After the merge from two to one bunches, we accelerate to top energy on harmonic $h = 1$ using the A6 and E6 RF cavities.
3. Before setting up the merge, we may want to accelerate to top energy on harmonic $h = 2$ just to test the RF systems.

1.3 Tue 23 Oct

1. Setup two-to-one merge in Booster. Accelerate to top energy on harmonic $h = 1$.

2. Begin setting up Booster extraction if time permits.

1.4 Wed 24 Oct

1. Continue work on two-to-one merge if necessary.
2. Setup Booster extraction and BTA transport.
3. Setup d injection into AGS using just one Booster load. This setup should be done an AU2. Measure revolution frequency on the AGS injection porch.
4. Setup Booster-AGS synchro with bunch-to-bucket capture at $h = 8$ on AGS injection porch.
5. Overnight setup 8 transfers of d from Tandem to Booster.

1.5 Thur 25 Oct

1. Setup cogging of 8 transfers of d from Booster to AGS. Accelerate to top energy on $h = 8$ without the eight-to-four merge.
2. Setup eight-to-four merge on the AGS injection porch.
3. Accelerate the four bunches to top energy on $h = 8$.

1.6 Fri 26 Oct

1. Setup AGS extraction.
2. Setup transport of d to W dump.

1.7 Sat 27 Oct

1. Continue work with d in Booster and AGS, and with transport to the W dump.
2. Overnight Tandem work with gold setup in MP7.

1.8 Sun 28 Oct

1. Tandem work with d and Au^{31+} transport in the TTB line.
2. Setup injection and acceleration of Au^{31+} in Booster on BU1. Here we capture and accelerate on $h = 6$.

1.9 Mon 29 Oct

1. Setup extraction of Au^{31+} from Booster and BTA transport.
2. Setup injection of Au^{31+} into AGS using just one Booster load. This setup should be done on AU1. Measure revolution frequency on the AGS injection porch.
3. Setup Booster-AGS synchro with bunch-to-bucket capture at $h = 24$ on the AGS injection porch.
4. Overnight setup 4 transfers of Au^{31+} from Tandem to Booster.

1.10 Tue 30 Oct

1. Setup cogging of 4 transfers of Au^{31+} from Booster to AGS.
2. Setup 24-to-12 and 12-to-4 merges on the AGS injection porch.
3. Accelerate the four bunches to top energy on $h = 12$.

1.11 Wed 31 Oct

1. Setup extraction of Au^{77+} from AGS.
2. Setup transport of Au^{77+} to W dump.

1.12 Thur 1 Nov

1. Begin 11-day cooldown mode.
2. Cooldown of RHIC blue ring begins.
3. Continue work with gold beam in Booster and AGS, and with transport to the W dump.

1.13 Fri 2 Nov

1. Switch back to deuteron setup and transport to W dump.
2. Do mode switch back to gold setup.

1.14 Sat 3 Nov

1. Work on mode switching back and forth between deuteron and gold setups with ions transported to the W dump.

1.15 Sun 4 Nov

1. Optimize deuteron and gold setups in Booster, AGS, and the ATR line.

1.16 Mon 5 Nov

1. Optimize deuteron and gold setups in Booster, AGS, and the ATR line.

1.17 Tue 6 Nov

1. Optimize deuteron and gold setups in Booster, AGS, and the ATR line.
2. If possible work on transport in the x and y arcs.
3. Blue cooldown complete?

1.18 Wed 7 Nov

1. Optimize deuteron and gold setups in Booster, AGS, and the ATR line.
2. If possible work on transport in the x and y arcs.
3. Blue cooldown complete?

2 Collider Setup

2.1 Thur 8 Nov

1. Blue cooldown complete.
2. Daytime PS and Cryogenics work in yellow.
3. Nighttime work with deuterons in blue.

2.2 Mon 12 Nov

1. Yellow cooldown complete.
2. Begin 10-day setup mode.
3. Initially 3 shifts of setup work per day.
4. Inject Au into yellow ring.

2.3 Sat 17 Nov

1. 2 shifts of setup work per day.
2. Nights for experiments.

2.4 Thur 22 Nov

1. d-Au collisions established. End setup mode.
2. Begin 9-day ramp-up and scrubbing mode.

2.5 Sat 1 Dec

1. End ramp-up and scrubbing.
2. Declare Physics.